

What is claimed is:

1 1. A method of detecting for uterine contractions of a
2 uterus of an animal having a body to initiate uterine
3 contractions when uterine contractions are absent, the
4 method including the steps of:

5 placing first and second electrodes in contact
6 with the body, the first electrode being placed in
7 direct contact with the uterus;

8 sensing electrical activity between the first
9 and second electrodes;

10 detecting for uterine contractions from the
11 sensed electrical activity; and

12 providing electrical current flow between the
13 first and second electrodes when uterine contractions
14 are undetected.

1 2. A method as defined in Claim 1 wherein the providing step
2 is performed when a uterine contraction is undetected
3 within a predetermined time of an immediately preceding
4 uterine contraction.

1 3. A method as defined in Claim 1 wherein the providing step
2 is performed when a uterine contraction is undetected
3 within a predetermined time from the beginning of an
4 immediately preceding uterine contraction.

1 4. A method as defined in claim 1 wherein the placing step
2 includes anchoring the first electrode to the uterus.

1 5. A method as defined in claim 1 wherein the placing step
2 includes passing the first electrode through skin of the
3 animal.

1 6. A method as defined in claim 1 wherein the placing step
2 includes releasably anchoring the first electrode to the
3 uterus.

1 7. A method as defined in claim 6 wherein the placing step
2 further includes anchoring the first electrode to the
3 myometrium.

1 8. A method as defined in claim 1 wherein the placing step
2 includes contacting the second electrode with the
3 uterus.

1 9. A method as defined in claim 8 wherein the contacting
2 step further includes anchoring the second electrode to
3 the uterus.

1 10. A method as defined in claim 8 wherein the contacting
2 step further includes passing the second electrode
3 through skin of the body.

1 11. A method as defined in claim 8 wherein the contacting
2 step further includes placing the second electrode in
3 direct contact with the myometrium.

1 12. A method as defined in claim 11 wherein the contacting
2 step further includes anchoring the second electrode to
3 the myometrium.

1 13. A method as defined in claim 8 wherein the second
2 electrode is a surface electrode and wherein the
3 contacting step includes making surface contact between
4 the second electrode and the body.

1 14. A method as defined in claim 13 wherein the contacting
2 step further includes making surface contact between the
3 surface electrode and a posterior portion of the body.

1 15. A system for detecting for uterine contractions and
2 stimulating a uterus of an animal having a body to
3 initiate uterine contractions when uterine contractions
4 are absent, the system comprising:

5 a first electrode;

6 a first anchor for anchoring the first electrode to
7 the uterus of the animal;

8 return current path establishing means for
9 establishing a return current path within the body, the
10 return current path including the first electrode;

11 a sense amplifier coupled to the first electrode
12 for sensing electrical activity of the body;

13 a detector coupled to the sense amplifier for
14 detecting for contractions of the uterus from the sensed
15 electrical activity; and

16 a source of electrical energy coupled to the first
17 electrode and responsive to the detector failing to
18 detect uterine contractions for providing electrical

19 energy to the body along the return current path for
20 initiating contractions of the uterus.

1 16. A system as defined in claim 15 wherein the detector
2 includes a timer for timing the time since a last
3 uterine contraction and wherein the source is responsive
4 to the timer timing a predetermined time period since
5 the last uterine contraction for providing the
6 electrical energy for initiating contractions of the
7 uterus.

1 17. A system as defined in claim 15 wherein the first anchor
2 is a releasable anchor.

1 18. A system as defined in claim 17 wherein the first anchor
2 is configured for anchoring the first electrode to the
3 myometrium.

1 19. A system as defined in claim 18 wherein the first anchor
2 comprises a screw-in tip.

1 20. A system as defined in claim 19 wherein the screw-in tip
2 is a helical coil.

1 21. A system as defined in claim 19 wherein the first
2 electrode includes structure forming the screw-in tip.

1 22. A system as defined in claim 17 wherein the return
2 current path establishing means comprises a second
3 electrode adapted for making electrical contact with the
4 body.

1 23. A system as defined in claim 22 wherein the second
2 electrode is arranged for direct contact with the uterus.

1 24. A system as defined in claim 23 further including a
2 second anchor for anchoring the second electrode to the
3 uterus.

1 25. A system as defined in claim 24 wherein the second anchor
2 is arranged for anchoring the second electrode to the
3 myometrium.

1 26. A system as defined in claim 24 wherein the second anchor
2 is a releasable anchor.

1 27. A system as defined in claim 26 wherein the second anchor
2 includes a screw-in tip.

1 28. A system as defined in claim 26 wherein the second
2 electrode includes structure forming the second anchor.

1 29. A system as defined in claim 22 wherein the second
2 electrode is a surface electrode for making surface
3 contact with the body.

1 30. A system for detecting for uterine contractions and
2 stimulating a uterus of an animal having a body to
3 initiate uterine contractions when uterine contractions
4 are absent, the system comprising:

5 first and second electrodes for establishing a
6 return current path within the body;

7 an anchor for releasably anchoring at least one of
8 the electrodes to the uterus of the animal;

9 a detector coupled to the first and second
10 electrodes for detecting for uterine contractions; and

11 a source of electrical energy responsive to the
12 detector failing to detect uterine contractions for
13 applying electrical energy to the first and second
14 electrodes for initiating contractions of the uterus.

1 31. A system for detecting for uterine contractions and
2 stimulating a uterus of an animal to initiate
3 contractions when uterine contractions are absent, the
4 system comprising:

5 a sensor for sensing electrical activity of the
6 uterus;

7 a processor for analyzing the electrical activity of
8 the uterus; and

9 an energy source for applying electrical energy to
10 the uterus responsive to the processor when the
11 electrical activity of the uterus fails to satisfy
12 predetermined detection criteria.

1 32. A system for detecting for uterine contractions
2 stimulating a uterus of an animal to initiate
3 contractions when uterine contractions are absent, the
4 system comprising:

5 a sensor for sensing electrical activity of the
6 uterus;

7 means for storing data associated with the sensed
8 electrical activity of the uterus;

9 a processor for analyzing the stored data; and

10 an energy source for applying electrical energy to
11 the uterus to initiate contractions of the uterus
12 responsive to the processor when the analyzed data fails
13 to satisfy predetermined detection criteria.

14 33. A method of detecting for uterine contractions and
15 stimulating a uterus of an animal to initiate uterine
16 contractions when uterine contractions are absent, the
17 method including the steps of:

18 sensing electrical activity of the uterus;

19 analyzing the electrical activity of the uterus; and

20 applying electrical energy to the uterus to initiate
21 contractions of the uterus when the analyzed electrical
22 activity of the uterus fails to satisfy predetermined
23 detection criteria.

1 34. A method of detecting for uterine contractions and
2 stimulating a uterus of an animal to initiate uterine

3 contractions when uterine contractions are absent, the
4 method including the steps of:

5 sensing electrical activity of the uterus;
6 generating data associated with the sensed
7 electrical activity;

8 storing the data associated with the sensed
9 electrical activity;

10 analyzing the stored data; and
11 applying electrical energy to the uterus to initiate
12 contractions of the uterus responsive to the analyzed
13 data failing to satisfy predetermined detection criteria.